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Report To The Congress

The Nuclear Waste Policy Act: 1984 Implementation Status, Progress, And Problems

The Nuclear Waste Policy Act of 1982 established federal responsibility and policy for the permanent disposal of highly radioactive materials. The Department of Energy's (DOE's) Office of Civilian Radioactive Waste Management has responsibility for implementing the act.

During 1984 DOE made progress in completing important actions required by the act. However, actions are generally taking longer than envisioned by the Congress or planned by DOE. GAO recommends that the Secretary of Energy improve the program's planning. In addition, to avoid unnecessary program costs, delays, and potential litigation, DOE will need (1) congressional direction on how many sites should be found suitable for a final repository and (2) continued authority to compensate victims of a nuclear waste accident.

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The Nuclear Waste Policy Act of 1982 established a federal program estimated to cost between $21 billion and $35 billion for the safe and permanent disposal of highly radioactive nuclear waste.

This report, GAO's second annual audit as required by the act, discusses the Department of Energy's (DOE's) progress and problems during 1984 in implementing the act's requirements. GAO also examines several issues--key to the program's long-term success--concerning DOE's

--approach to selecting a waste disposal site,

--negotiations of agreements with states, and

--planning for monitored retrievable spent fuel storage.

BACKGROUND

The act established numerous requirements for DOE decisions and reports leading to the (1) selection of sites for the permanent burial of high radioactive materials in deep underground rock formations (repositories), (2) construction and operation of these repositories, and (3) provision of federal short-term (interim) or long-term waste storage that can be monitored and retrieved if permanent disposal is delayed. DOE is committed to accept waste for disposal beginning in 1998. The program is financed by the owners and generators of waste through the Nuclear Waste Fund. In fiscal years 1984 and 1985, a total of $647 million was provided through this funding.

Another law, the Price-Anderson Act, provides financial protection against accidents to nuclear power plant owners and others and currently guarantees compensation to victims of a nuclear waste accident. The government's authority to provide financial protection expires in 1987.

RESULTS IN BRIEF

Although 1984 marked the achievement of several important program objectives, such as issuance of final siting guidelines and initiation of spent fuel demonstration projects, many actions required by the act have been delayed. Such

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delays have generally been caused by DOE's unrealistic scheduling and inadequate planning for contingencies. These delays have implications for DOE's ability to operate a repository by 1998.

GAO also found that DOE's approach to siting the first repository may not ensure its timely completion. DOE has been unable to conclude an agreement with the state of Washington because of the state's concerns about liability for a nuclear waste accident. Moreover, DOE's plans for monitored retrievable storage could hinder the repository program's progress.

PRINCIPAL FINDINGS

Siting Approach

DOE spent most of 1984 preparing for the Secretary's recommendation of three sites for detailed testing. In December 1984 DOE published siting guidelines, which the act required by July 1983, and draft environmental assessments, which the act did not require although the act did assume these assessments would be final by January 1985. Although these documents are the foundation for DOE's site selection decisions, they had been delayed during numerous internal DOE reviews. DOE's planning has been overly optimistic. For example, DOE did not anticipate that drafts of these documents would require as many revisions as they did.

Currently, DOE plans to recommend sites in Nevada, Texas, and Washington for detailed site testing. Although DOE expects that all three sites will ultimately be suitable for a repository, DOE has interpreted the act as requiring that only one suitable site must be found after this testing. The Nuclear Regulatory Commission, states, and others have questioned DOE's interpretation of the act. Most of these parties believe that three sites must be found suitable from which one is to be recommended for a repository. GAO believes that DOE's approach jeopardizes the program's success because if backup sites are not available, successful legal challenges or a state or Indian tribe's disapproval of the recommended site could cause a major setback to the program. The

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	Congress could override this disapproval, but DOE considers an override unlikely.
Consultation and Cooperation Agreements	The act requires DOE to negotiate formal agreements with states and affected Indian tribes to resolve their concerns. Although no agreements have yet been made final, one draft agreement with the state of Washington has been negotiated and is currently being reviewed by the state. DOE has also begun negotiations with the Umatilla Indians. Other states and tribes have decided to wait until further siting decisions are made before entering into negotiations with DOE. An issue that could affect acceptance of such agreements is whether DOE can meet states' demands that the government provide unlimited compensation to victims of a nuclear waste accident. Because the Price-Anderson Act limits liability for DOE contractor activities to $500 million per accident, DOE cannot provide this desired assurance.
Monitored Retrievable Storage Plans	The act requires that DOE submit a proposal to the Congress by June 1985 on the need for monitored retrievable storage facilities. The act calls for the repository program to proceed regardless of whether these storage facilities are built. Developing both the monitored retrievable storage program, if authorized by the Congress, and repositories in a timely manner will be difficult for DOE because both programs will be competing for limited federal personnel and financial resources from the Nuclear Waste Fund. Using limited staff resources on concurrent activities has already caused delays in the waste program. In addition, DOE has shifted some funding from the repository program to monitored retrievable storage to complete the proposal to the Congress by January 1986.
MATTERS FOR CONGRESSIONAL CONSIDERATION	The Congress should consider whether DOE's approach to siting the first repository is appropriate or whether DOE needs to adopt a different approach to provide backup sites. GAO presents several alternatives.

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RECOMMENDATIONS

If the Price-Anderson Act is extended, the Congress should increase the act's liability and compensation provisions for nuclear incidents involving high-level radioactive waste. GAO has made similar recommendations in past reports to increase the protection for DOE contractor activities to a level equivalent to the protection afforded nuclear power plant owners.

GAO also recommends that the Secretary of Energy

--develop contingency plans for detailed testing of at least one additional repository site, and

--determine how DOE will ensure that the monitored retrievable storage program would operate so as not to impede the repository program.

GAO makes other recommendations to the Secretary in chapter 4.

AGENCY COMMENTS

DOE disagreed with the principal findings of the report and the specifics of GAO's recommendations. DOE questioned GAO's position on (1) the risks in DOE's siting approach for the first repository and (2) the potential for monitored retrievable storage to compete with the repository program. DOE believes that its siting approach is conservative and prudent and plans for its monitored retrievable storage proposal to include a complete budget to ensure adequate resources for the program. GAO believes that the risks of DOE's current siting approach are of serious concern and that contingency plans are needed so that the public will know in advance how DOE would test additional sites. In addition, DOE has not yet provided any specifics on how a monitored retrievable storage program would be administered to ensure that each program can operate without interfering with the other.

The Nuclear Regulatory Commission, five states, one Indian tribe, and four DOE contractors also formally commented on the report. GAO evaluated all these comments and incorporated them where appropriate in the report. Because of the length of these comments, they have not been reproduced in this report but are available upon request from GAO.

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ABBREVIATIONS

CBO	Congressional Budget Office
CP&L	Carolina Power and Light
DOE	Department of Energy
EA	environmental assessment

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EPA	Environmental Protection Agency
GAO	General Accounting Office
MRS	monitored retrievable storage
NRC	Nuclear Regulatory Commission
NWPA	Nuclear Waste Policy Act
OCRWM	Office of Civilian Radioactive Waste Management
OMB	Office of Management and Budget
OTA	Office of Technology Assessment
USGS	U.S. Geological Survey

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